

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Iqbal AHMED et al.

Serial No.: 10/706,569

Filing Date: November 12, 2003

Confirmation No.: 6659

Examiner: Rip A. Lee

Art Unit: 1713

For: **SUPERABSORBENT POLYMER HAVING DELAYED  
FREE WATER ABSORPTION**

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**AFFIDAVIT UNDER 37 C.F.R. 1.132**

I am Iqbal Ahmed. I hold a BS with Honors in Chemistry from University of Chittagong, Bangladesh; a MS in Applied Chemistry from University of Dhaka, Bangladesh; and a PhD from North East London Polytechnic, London, England, and I specialized in the area of Polymer Chemistry. Upon completion of my PhD in December 1981, I immigrated to the U.S.A. in June 1982. I started working in the field of water-soluble polymers as a Post Doctoral Research Associate in the Chemistry Department, University of Lowell, Lowell, MA. I joined Phillips Petroleum Company located in Bartlesville, OK as a Research Associate Chemist and started working in the field of water-soluble/hydrogel/superabsorbent polymers in 1987 and continued working in this field to the present. Since June 1, 1999, I have been employed as a Senior Research Scientist by Stockhausen Inc. located in Greensboro, NC.

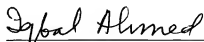
I have reviewed the Advisory Action mailed 04/13/2007 including the Continuation Sheet wherein it is stated "Applicant submit that the examples show use of surface crosslinked SAPs such as SXM71, SXM77, and SXM880. Examiner requests submission of technical data sheets or product bulletin corroborating this notion."

First, the acronym SXM is used on Stockhausen superabsorbent polymer products to indicate that the superabsorbent polymer products are surface crosslinked.

Second, this will confirm that SXM71, SXM77, and SXM880 are surface crosslinked products made and sold by Stockhausen.

Surface crosslinking is a process that increases the crosslink density of the polymer matrix in the vicinity of the superabsorbent particle surface with respect to the crosslinking density of the particle interior. After polymerization, the superabsorbent polymer becomes a crosslinked hydrogel which is then prepared into superabsorbent polymer particles. The superabsorbent polymer particles such as SXM71, SXM77, and SXM880 are surface crosslinked by the addition of a surface crosslinking agent and heat-treatment. The dried superabsorbent polymer particles are coated with a crosslinking agent solution such as with about 0.5 wt% ethylene carbonate and about 4wt% water using a about 20 wt% aqueous solution, and the coated superabsorbent polymer particles are heated to about 190°C for about 25 minutes.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001; and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
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Dr. Iqbal Ahmed

Date: June 18, 2007